



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/981,516	10/17/2001	Steven A. Shaya	JJCC-0003	7651
7590 Woodcock Washburn LLP 46th Floor One Liberty Place Philadelphia, PA 19103				
			EXAMINER THEIN, MARIA TERESA T	
			ART UNIT 3627	PAPER NUMBER
			MAIL DATE 06/10/2009	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

---

*Ex parte* STEVEN A. SHAYA, NEAL MATHESON,  
JOHN ANTHONY SINGARAYAR, NIKIFOROS KOLLIAS  
and JEFFREY ADAM BLOOM

---

Appeal 2008-005606  
Application 09/981,516  
Technology Center 3600

---

Decided:<sup>1</sup> June 10, 2009

---

Before HUBERT C. LORIN, JOSEPH A. FISCHETTI, and BIBHU R.  
MOHANTY, *Administrative Patent Judges*.

MOHANTY, *Administrative Patent Judge*.

DECISION ON APPEAL

---

<sup>1</sup> The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, begins to run from the decided date shown on this page of the decision. The time period does not run from the Mail Date (paper delivery) or Notification Date (electronic delivery).

## STATEMENT OF THE CASE

The Appellants seek our review under 35 U.S.C. § 134 of the final rejection of claims 1-29 and 103 which are all the claims pending in the application. We have jurisdiction under 35 U.S.C. § 6(b) (2002).

## SUMMARY OF THE DECISION

We REVERSE.

## THE INVENTION

The Appellants' claimed invention is directed to systems and methods of utilizing communications networks and product recommending processing operating on multivariate data characterizing consumers and products to predict product use effects or recommend products from a predefined population of commercially available products. (Specification [0031]). Claim 1, reproduced below, is representative of the subject matter of appeal.

1. A method of formulating individualized product recommendations, comprising:
  - receiving a first set of data from a consumer regarding a target substrate that includes a requirement to be addressed by a product;
  - and
  - generating a set of individualized product recommendations for the consumer from a plurality of products within a product category with the assistance of one or more computing devices, the generating comprising:
    - feeding the first set of data as inputs into an intelligent performance-based product recommendation engine;
    - classifying the consumer, based on the inputs, in a population of consumers who previously used a product in the product category in connection with a substantially similar substrate and who are

substantially similar to the consumer;

determining, based on the inputs and the classification of the consumer, a likelihood that the products in the product category will address the requirement with a predefined level of success when used in connection with the target substrate; and

selecting a set of products from the product category having a predefined likelihood of successfully addressing the requirement, the selected set of products comprising the set of individualized product recommendations.

### THE REJECTIONS

The Examiner relies upon the following as evidence in support of the rejections:

Herz	US 6,029,195	Feb. 22, 2000
Bieganski	US 6,321,221 B1	Nov. 20, 2001
Hosken	US 6,438,579 B1	Aug. 20, 2002
Wilmott	US 6,782,307 B2	Aug. 24, 2004

The following rejections are before us for review:

1. Claims 1-4, 8, 13-27, and 103 are rejected under 35 U.S.C. § 102(e) as anticipated by Herz.
2. Claims 5-7 are rejected under 35 U.S.C. § 103(a) as unpatentable over Herz and Bieganski.
3. Claims 9-12 are rejected under 35 U.S.C. § 103(a) as unpatentable over Herz and Hosken.
4. Claims 28-29 are rejected under 35 U.S.C. § 103(a) as unpatentable over Herz and Wilmott.

## THE ISSUE

At issue is whether the Appellants have shown that the Examiner erred in making the aforementioned rejections.

This issue turns on whether Herz discloses “classifying the consumer, based on the inputs, in a population of consumers who previously used a product in the product category, in connection with a substantially similar substrate and who are substantially similar to the consumer.”

## FINDINGS OF FACT

We find the following enumerated findings of fact (FF) are supported at least by a preponderance of the evidence:<sup>2</sup>

FF1. Herz discloses a system for the customized electronic identification of desirable objects, such as news articles, in an electronic media environment (Abstract).

FF2. Herz constructs a “target profile” for each target object in the electronic media for example based on the frequency with each word appears in the article. Herz also constructs a “target profile interest summary” for each user which describes the user’s interest level in various types of target objects (Abstract).

FF3. Herz discloses that the “target profiles” are evaluated to generate a user customized rank ordered listing of the target objects (Abstract).

FF4. Herz discloses that the information delivery process is based on determining a similarity between a profile for the target object and the

---

<sup>2</sup> See *Ethicon, Inc. v. Quigg*, 849 F.2d 1422, 1427 (Fed. Cir. 1988) (explaining the general evidentiary standard for proceedings before the Patent Office).

profiles of target objects for which the user (or a similar user) has provided positive feedback in the past (Col. 6:38-43).

FF5. Herz discloses that once a new user has been partially profiled the method disclosed predicts if the new user's interests resemble the known interests of other users with similar profiles (Col. 28:55-58).

FF6. Herz fails to disclose classifying the consumer in a population of consumers who previously used a product in the product category and who are substantially similar to the consumer.

## PRINCIPLES OF LAW

### *Principles of Law Relating to Anticipation*

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987). Analysis of whether a claim is patentable over the prior art under 35 U.S.C. § 102 begins with a determination of the scope of the claim. We determine the scope of the claims in patent applications not solely on the basis of the claim language, but upon giving claims their broadest reasonable construction in light of the specification as it would be interpreted by one of ordinary skill in the art. *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004). The properly interpreted claim must then be compared with the prior art.

### *Principles of Law Relating to Obviousness*

“Section 103 forbids issuance of a patent when ‘the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including (1) the scope and content of the prior art, (2) any differences between the claimed subject matter and the prior art, (3) the level of skill in the art, and (4) where in evidence, so-called secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966). *See also KSR*, 550 U.S. at 407 (“While the sequence of these questions might be reordered in any particular case, the [*Graham*] factors continue to define the inquiry that controls.”) In *KSR*, the Supreme Court emphasized “the need for caution in granting a patent based on the combination of elements found in the prior art,” *id.* at 415-16.

## ANALYSIS

The Appellants argue that the rejection of claims 1 and 103 is improper because Herz fails to disclose “classifying the consumer ... in a population of consumers who previously used a product in the product category ... and who are substantially similar to the consumer” (Br. 11).

In contrast the Examiner has determined that Herz does disclose “classifying the consumer ... in a population of consumers who previously used a product in the product category ... and who are substantially similar to the consumer” (Ans. 18-19). The Examiner has determined that the process of Herz determines a similarity between a profile for a target object and target objects for which the user, or similar users, provided positive feedback in the past (Ans. 18). The Examiner has also determined that once new users are profiled in Herz, it is predicted if the new user’s interests resemble the known interests of users with similar profiles (Ans. 19).

We agree with the Appellants. Herz discloses a system for the customized electronic identification of desirable objects, such as news articles, in an electronic media environment (FF1). Herz constructs a “target profile” for each target object in the electronic media for example based on the frequency with each word appears in the article (FF2). As presented here claims 1 and 103 both include limitations which require classifying the consumer in 1) a population of consumers who previously used a product in the product category in connection with a substantially similar substrate and 2) who are substantially similar to the consumer. While Herz does construct a “target profile interest summary” for each user which describes the user’s interest level in various types of target objects (FF2), this does not relate the consumer to “a population of consumers who previously used a product in the product category in connection with a substantially similar substrate.” Also, while Herz does show that once a new user has been partially profiled the method disclosed predicts if the new user’s interests resemble the known interests of other users with similar profiles (FF5) as asserted by the Examiner, this does not meet the claim limitations for “classifying ... the consumer ... in a population of consumers who previously used a product in the product category in connection with a substantially similar substrate” as required for example in claim 1. Herz has not disclosed classifying the consumer in a population of consumers who previously used a product in the product category and who are substantially similar to the consumer (FF6) as claimed. For these reasons the rejection of claims 1 and 103 under 35 U.S.C. § 102(e) as anticipated by Herz is not sustained. The rejection of dependent claims 2-4, 8, and 13-27 which depend from claim 1 is not sustained for these same reasons.



The rejection of claims 5-7 under 35 U.S.C. § 103(a) as unpatentable over Herz and Bieganski is not sustained for the same reasons given above as the Examiner has not asserted that Bieganski discloses the claim limitation addressed in the discussion of claims 1 and 103 above.

The rejection of claims 9-12 under 35 U.S.C. § 103(a) as unpatentable over Herz and Hosken is not sustained for the same reasons given above as the Examiner has not asserted that Hosken discloses the claim limitation addressed in the discussion of claims 1 and 103 above.

The rejection of claims 28-29 under 35 U.S.C. § 103(a) as unpatentable over Herz and Wilmott is not sustained for the same reasons given above as the Examiner has not asserted that Wilmott discloses the claim limitation addressed in the discussion of claims 1 and 103 above.

#### CONCLUSIONS OF LAW

We conclude that Appellants have shown that the Examiner erred in rejecting claims 1-4, 8, 13-27, and 103 under 35 U.S.C. § 102(e) as anticipated by Herz.

We conclude that Appellants have shown that the Examiner erred in rejecting claims 5-7 under 35 U.S.C. § 103(a) as unpatentable over Herz and Bieganski.

We conclude that Appellants have shown that the Examiner erred in rejecting claims 9-12 under 35 U.S.C. § 103(a) as unpatentable over Herz and Hosken.

We conclude that Appellants have shown that the Examiner erred in rejecting claims 28-29 under 35 U.S.C. § 103(a) as unpatentable over Herz and Wilmott.

DECISION

The Examiner's rejection of claims 1-29 and 103 is reversed.

REVERSED

hh

Woodcock Washburn LLP  
46th Floor  
One Liberty Place  
Philadelphia, PA 19103